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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/444,541	11/22/1999	PAUL R. GAGON	BBE1199CIP	8794

7590 11/22/2004  
FOLEY & LARDNER  
2029 CENTURY PARK EAST  
SUITE 3500  
LOS ANGELES, CA 90067-3000

EXAMINER

LEE, PING

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/444,541

**Applicant(s)**

GAGON, PAUL R.

**Examiner**

Ping Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-18,25,26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 19-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/16/03. See also the office action mailed on 1/15/04.

### *Claim Objections*

2. Claim 20 is objected to because of the following informalities: the status identifier "(Previously presented)" should be corrected as --(Withdrawn)--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohn (US 4,891,841) in view of Gagon (US 5,736,897).

Regarding claims 18, 11-14, Bohn shows the all pass phase inverter (80) having an input coupled to receive the program signal (15) and an output providing an inverted program signal (to R5), a band pass filter having a predetermined Q (45) and an input

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connected (according to Webster's dictionary, connected means joined or linked together; Fig. 1 clearly shows that the band-pass filter 45 is joined or linked to the program signal 15) to the program signal (15) to receive the program signal (15) and to provide an inverted program signal (to 25), and a summing amplifier (35) for adding the inverted program signal (from 80) to the inverted band-pass boosted program signal (from 45) and for providing a composite output signal (40). Bohn fails to show the input buffer.

Gagon teaches an input buffer means with a state-variable filter for providing buffering, compensation for high, mid and low frequencies separately and automatic balancing of the mid and high frequency signals. This input buffer means could be used for receiving the signal from a tape player and compensating the bandwidth imposed by the dynamic range of the tape. Bohn's system was useful to adjust the frequency equalization in recording and broadcast industries (co. 1, lines 14-15). One skilled in the art would have expected that the source in Bohn's system would receive input from any medium, such as tape, for recording and broadcasting. Thus, it would have been obvious to one of ordinary skill in the art to modify Bohn's system by incorporating the input buffer means as taught in Gagon in order to modify and improve the dynamic range of the signal from a tape player.

Regarding claims 15-17, Bohn fails to show the power amplifier and the speaker means. However, Bohn teaches that the equalizer is used for processing the audio signal. It was well known in the art to reproduce acoustic sound by using a speaker means connected to an equalizer and a power amplifier. Thus, it would have been

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obvious to one of ordinary skill in the art to reproduce the sound using well known speaker means and power amplifier connected to the signal generated by Bohn's system in view of Gagon in order to have an equalizer compensating the signal from a narrow dynamic range, such as the one from a tape player.

5. Claims 11-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagon (US 5,736,897) in view of Bohn (US 4,891,841).

Regarding claims 18, 11-14, Gagon shows the structure of the state-variable filter input buffer means, but fails to show the all pass phase inverter (80), a band pass filter having a predetermined Q (45) and a summing amplifier (35). Bohn teaches an equalizer using such components to provide independent and smooth band equalizing. Thus, it would have been obvious to one of ordinary skill in the art to modify Gagon's system by using the equalizer as taught in Bohn to further improve the audio signal response with smooth band equalizing.

Regarding claims 15-17, neither Gagon nor Bohn shows the power amplifier and the speaker means. However, both Gagon and Bohn teach that the device is used for processing the audio signal. It was well known in the art to reproduce acoustic sound by using a speaker means connected to an equalizer and a power amplifier. Thus, it would have been obvious to one of ordinary skill in the art to reproduce the sound using well known speaker means and power amplifier connected to the signal generated by Gagon's system in view of Bohn in order to generate an improved sound signal from a source with a narrow dynamic range, such as the one from a tape player.

***Response to Arguments***

6. Applicant's arguments filed 10/15/04 have been fully considered but they are not persuasive.

Applicant argued that the claims have been amended as suggested by examiner during the telephone interview on Thursday 09/02/04. Therefore, the claims overcame rejected based on Bohn in view of Gagon or Gagon in view of Bohn.

It is noticed that examiner suggested the applicant to clearly define the connection between the input buffer and the band-pass filter such that the output of the input buffer is directly connected to the input of the band-pass filter. Bohn reference fails to show such a direct connection. The newly amended claims merely stated that the input of the band-pass filter is connected to the output of the input buffer. This limitation fails to clearly define the connection between the input buffer and the band-pass filter as disclosed in Fig. 1. According to dictionary, "connected" means joined or linked together. Bohn shows the input of the band-pass filter (45) is linked or joined together to the program signal. Therefore, the newly amended claims are still being rejected under Bohn in view of Gagon or Gagon in view of Bohn.

***Conclusion***

7. This is a continuation of applicant's earlier Application No. 09/444,541. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL**

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even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865. The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ping Lee  
Primary Examiner  
Art Unit 2644

pwl